SHTELIK, V. G.:   Master Phys-Math Sci (diss) -- "On solutions of systems of

differential equations with almost periodic and 'close to periodic' co-

efficients".   Kiev, 1958. 5 pp (Acad Sci Ukr SSR, Inst of the Physics of Metal),

150 copies (KL, No 3, 1959, 108)

SHTELIK, V.G. [Shtelik, V.H.]

Stability of solutions of systems close to the periodic. Dop. AN URSR
no.6:598-600 '58.   (MIRA 11:9)

1.Institut matematiki AN USSR. Predstavil akademik AN USSR
I.Z. Shtokalo.
                    (Functions, Periodic)

41-1-11/15

AUTHOR: SHTELIK, V.G. (Kiyev)

TITLE: On the Determination of a Finite Time Interval of the Stability of Solutions of a System of Differential Equations (K voprosu ob opredelenii konechnogo intervala vremeni ustoychivosti resheniy sistemy differentsial'nykh uravneniy)

ABSTRACT: The system

$$(1) \quad \frac{dx_j}{dt} = \sum_{i=1}^{N} p_{ji}(t)x_i + X_j (t,x_1,\ldots,x_N) \quad , \quad j=1,\ldots,N,$$

with complex-valued $p_{ji}(t)$ which satisfy the Lipschitz condition with the constant α for $t_o \leqslant t \leqslant T$, and with X_j the power series expansion of which for $|x_j| \leqslant h$, $t_o \leqslant t \leqslant T$ begins with terms of at least second order, is assumed to possess a unique solution.

Definition: Let $x_i(t)$ be a solution and $x_{io} = x_i(t_o)$, let a_{ik} be arbitra. ·onstants with det $\|a_{ik}\| \neq 0$. The solution is called stable on the finite interval $\left[t_o, t_o + \tau\right]$, if for a

Card 1/3

On the Determination of a Finite Time Interval of the Stability of   41-1-11/15
Solutions of a System of Differential Equations

sufficiently small A on $\left[t_0, t_0+\tau\right]$ it follows from

$$\sum_{s=1}^{N} \left| a_{s1}x_{10} + \cdots + a_{sN}x_{N0} \right|^2 \leqslant A$$

that there it is also

$$\sum_{s=1}^{N} \left| a_{s1}x_1 + \cdots + a_{sN}x_N \right|^2 \leqslant A$$

Theorem: Let (1) satisfy the conditions: 1. $\left| x_j \right| \leqslant \chi \left(\sum_{j=1}^{N} |x_j|^2 \right)^{\frac{1}{2}}$,

χ is a small constant independent of t. 2. All the roots of
the equation $\det \| p_{ij}(t_0) - \lambda \delta_{ij} \| = 0$ have negative real parts.

Then the solution is stable on the finite interval $\left[t_0, t_0+\tau\right]$,
whereby it is

$$\tau = \frac{2}{\alpha N^3 (N-1)^{\frac{N-1}{2}}} \left[(N-1)!(2N-1)2^N p^0 \right]^{-\frac{N(N-1)}{2}} \left[\frac{2pN(N-1)}{2+N(N-1)} \right]^{\frac{N(N-1)}{2}+1} - \frac{\chi}{\alpha}$$

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On the Determination of a Finite Time Interval of the Stability of   41-1-11/15
Solutions of a System of Differential Equations

Here it denotes $p^0 = \sup p_{ij}(t_0)$ and $-p$ the upper bound of the real parts of the roots. 3 Soviet references are quoted.

SUBMITTED: 4 November 1957

AVAILABLE: Library of Congress

1. Differential equations—Solution—Stability

Card 3/3

SHTELIK, V.G. (Kiyev)

Determining the finite time interval of solution stability of
simultaneous differential equations. Ukr.mat.zhur. 10 no.1:100-102
'58.   (MIRA 11:4)
        (Differential equations)

AUTHOR: Sntelik, V.G.

SOV/41-10-3-7/14

TITLE: On the Question Concerning the Solutions of a Linear System
of Differential Equations With Almost Periodic Coefficients
(K voprosu o resheniyakh lineynoy sistemy differentsial'nykh
uravneniy s pochti periodicheskimi koeffitsiyentami)

ABSTRACT: The author considers the system

$$(1) \quad x' = (Q_0 + Q(t))x \ ,$$

where Q_0 is a constant matrix and $Q(t) = \sum_{k \neq o} Q_k \, e^{i \nu_k t}$, where

$$\sum_{k \neq o} q^k_{\alpha\beta} = q_{\alpha\beta} < \infty \ , \quad Q_k = (q^k_{\alpha\beta})^m_{\alpha,\beta=1}$$ holds. Necessary and

sufficient conditions are given that the fundamental matrix of
the solutions of (1) has the form $\exp\left\{Q_0(t-t_0)\right\} G(t,t_0)$,

where G is an almost periodic matrix. Furthermore there are
given sufficient conditions for the stability and instability

Card 1/2

On the Question Concering the Solutions of a Linear   SOV/41-10-3-7/14
System of Differential Equations With Almost Periodic Coefficients

of the solutions of (1) and of $x' = (Q_o + \varepsilon Q(t))x$ in the
critical case. Here the author uses the transformation of
Krylov and Bogolyubov [Ref 13]. He thanks Professor Yu.A.
Mitropol'skiy for valuable references.
There are 16 references, 14 of which are Soviet, 1 is French,
and 1 Roumanian.

SUBMITTED: April 28, 1958 (Kiyev)

Card 2/2

SHTELIK, V.G.

28681

S/021/60/000/007/004/009
D211/D305

13.2540

AUTHORS: Shevelo, V.M., and Shtelik, V.H.

TITLE: On the motion of a pendulum of variable length
              and mass

PERIODICAL: Akademiya nauk Ukrayins'koyi RSR. Dopovidi, no. 7,
              1960, 884 – 887

TEXT: The aim of the paper is to consider the motion of a pendu-
lum with variable mass and length and to determine the initial va-
lues, for which the motion is an oscillation or a rotation. The
equation of motion of such a pendulum – using the law of conserva-
tion of momentum – could be described by the following equation

$$\ddot{\theta} + \left(\frac{\dot{m}}{m} + \frac{\dot{l}}{l} + \right)\dot{\theta} + \frac{g}{l}(\sin\theta - \sin\theta_p) = \frac{\dot{m}}{ml}u \qquad (1)$$

where $m(t)$ is a mass, $l(t)$ is a length, $\theta_p(t)$ – angle of deflec-
tion from the positions of stable equilibrium, $u(t)$ – projection

Card 1/2

28681

On the motion of a pendulum ...

S/021/60/000/007/004/009
D211/$305

of velocity on the tangent ● the trajectory of the pendulum. By the oscillatory motion of a pendulum described by Eq. (1) in the interval of time $t_o \leqslant t \leqslant t_o + T$. It is understood such motion that $\theta(t)$ has not less than one turning point, i.e. $\dot{\theta}(t_j) = 0$, $t_j t$ $[t_o, \leftarrow$ $t_o + T]$, $(j = 1, \ldots, s)$, $s > 1$; $/\theta_o, \theta_p(t_o)/ < \pi$; $-\pi < \theta(t_j) -$ $- \theta_p(t_j) < \pi$. $-\pi < \theta(t_o + T) - \theta_p(t_o + T) < \pi$. The motion of pendulum when $\dot{\theta}(t)$ is different from ● in the time interval $t_o < t$ $\leqslant t_o + T$ and $\theta(t_o + T) > \pi - \theta_p(t_o + T)$ or $\theta(t_o + T) \leqslant -\pi + \theta$ $(t_o + T)$ is called the rotational motion. The set of conditions for θ_o, $\dot{\theta}_o$ which guarantee the oscillating motion are then called the region of oscillation. The region of rotation could be defined in the same way. The author then ●onsiders the case $\theta_p = 0$, $u = 0$.

ASSOCIATION: Instytut matematyky AN USSR (Institute of ●athematics AS UkrSSR)
PRESENTED: by Y.Z. Shtokalo, Academician AS UkrSSR
SUBMITTED: July 17, 1959
CARD ●●

S/021/60/000/008/001/011
D210/D305

V. G.

AUTHORS: Shevelo, V.M., and Shtelik, V.H.

TITLE: On the condition of oscillation (non-oscillation) of
             solutions of non-linear equations of the second order
             with variable coefficients

PERIODICAL: Akademiya nauk Ukrayins'koyi RSR. Dopovidi, no. 8,
            .1960, 1007 - 1010

TEXT: The aim of the paper is to find the regions of oscillation
and non-oscillations for solving the second order differential
equation

$$\ddot{y} + s(t)\,\dot{y} + r(t)\,f(y) = 0, \tag{1}$$

where $s(t)$, $r(t) > 0$ are continuous functions in the interval
$t_0 \leqslant t \leqslant t_0 + T$; $f(0) = 0$ and $f(y)$ satisfies the Lipshits condi-
tions and is such that $\int f(y)dy = F(y) \leqslant \bar{F}$, $\bar{F} > 0$ for all y. The
oscillating solution of Eq. (1) in the interval $t_0 \leqslant t \leqslant t_0 + T$ is

Card 1/5

such a solution $y(t)$ for which $\dot{y}(t)$ for $t \in [t_0, t_0 + T]$ has not less than one zero, i.e. where b is a constant $[\dot{y}(t_j) = 0$, $j = 1,$ ..., s, $s > 1]$ and $/y(t_j)/ < b$, $/y_0/ < b$. The solution of (1) is a non-oscillating solution in the interval $t_0 \leqslant t \leqslant t_0 + T$, if $\dot{y}(t)$ has no zeros and $/y(t_0 + T)/ > b$. The region of oscillation of the solutions of the equation is the set of initial conditions y_0, $\dot{y}_0$ which in the given interval $(t_0, t_0 + T)$ secure the existence of oscillating solutions. The author shows next how to change Eq. (1) into a new form

$$y^2 = Q(t) \left[1 - k^2(t)\, G(t) \right] \tag{4}$$

where

$$Q(t) = \exp\left(-2 \int_{t_0} s\,dt \right) \left[\dot{y}_0^2 + 2 (R_0 F_0 + \alpha + \beta) \right],$$

$$k^2(t) = \frac{4(\alpha + \beta)}{\dot{y}_0^2 + 2(R_0 F_0 + \alpha + \beta)}, \tag{5}$$

Card 2/5

On the condition of oscillation ...   S/021/60/000/008/001/011
D210/D305

$$0 \leq G(t) = \frac{(RF + u) + (\beta - \int_{t_0}^{t} R'F dt)}{2(\alpha + \beta)} \leq 1,$$ (5)

$R_0 = R(t_0), \ F_0 = F(y_0).$

$R_0 = R(t_0), \ F_0 = F(y_0) \ R(t) = r(t) \exp(2 \int_{t_1}^{t_2} s dt) > 0$ and $\alpha(t), \beta(t)$

functions for which

$$R(t)F(y) \leq \alpha(t), \ \int_{t_0}^{t} R'(t)F(y)dt \leq \beta(t), \ \alpha(t) + \beta(t) > 0.$$ (3)

The function $\alpha(t), \beta(t)$ would be found as follows: a) If $R' \geq 0$

Card 3/5

On the condition of oscillation ...   S/021/60/000/008/001/011
D210/D305

then $\alpha = R\overline{F}$, $\beta = \int_{t_0}^{t} R'\overline{F}dt$; b) If $R' \leqslant 0$ then $\alpha = R\overline{F}$, $\beta = -\int_{t_0}^{t} R'\overline{F}dt$;

c) If R' changes the sign then $\alpha = R\overline{F}$, $\beta = (t - t_0)R'\overline{F}$. Theorem:

If $K^2 < 1$ for $t_0 < t \leqslant t_1$ and if $\int_{t_0}^{t_1} \sqrt{Q(1 - k^2)}dt > b + /y_0/$ then

the solutions for initial conditions, for which $k^2 < 1$ will be
non-oscillating during $t_0 \leqslant t \leqslant t_1$. If $k^2 > 1$ for $t_0 \leqslant t \leqslant t_2$ and

$\int_{t_0}^{t_2} \sqrt{Q}\, dt < b - /y_0/$ then the solutions for the initial conditions
for which $k^2 > 1$ could be oscillating. This could be provided di-
rectly using Eqs. (4) and (5). There is 1 Soviet-bloc reference.

Card 4/5

On the condition of oscillation ...

S/021/60/000/008/001/011
D210/D305

ASSOCIATION: Instytut matematyky AN URSR (Institute of Mathematics AS UkrSSR)

PRESENTED: by Y.Z. Shtokalo, Academician AS UkrSSR

SUBMITTED: July 17, 1959

Card 5/5

SHTELIK, V. G. and SHEVELO, V. N.

"Some problems of the theory of nonlinear vibration on non-autonomous one-dimensional systems."

Paper presented at the Intl. Symposium on Nonlinear Vibrations, Kiev, USSR, 9-19 Sep 61

Institute of Mathematics of Sciences of the Ukrainian SSR

/1.3400

AUTHORS: Shevelo, V. N., Shtelik, V. G. (Kiyev)

TITLE: Sufficient conditions for the stability of solutions of some nonlinear second-order equations

PERIODICAL: Ukrainskiy matematicheskiy zhurnal, v. 14, no. 1, 1962, 109 – 112

TEXT: The authors investigate the stability of the trivial solution $z = 0$ of the system $z'' + \alpha(t)z' + \delta(t)z + g(z, t) = 0$. It is demonstrated that the solution $z = 0$ is asymptotically stable if the conditions $0 < \alpha_1 \leqslant |\alpha(t)| \leqslant \alpha_2 < \infty$, $0 < \delta_1 \leqslant |\delta(t)| \leqslant \delta_2 < \infty$, $4\alpha_1\delta_1(\alpha_1 + \alpha_2) > (\delta_2 - \delta_1)(\alpha_2^2 + 4\delta_1 \operatorname{sign}\delta(t))$, $\operatorname{sign}\delta(t) = \operatorname{sign}\alpha(t) = 1$ are fulfilled. If the relation $\operatorname{sign}\delta(t) = \operatorname{sign}\alpha(t) = 1$ is not valid, the solution $z = 0$ will be unstable. It will also be unstable if the conditions $|\alpha(t)| \leqslant \alpha_2 < \infty$, $\operatorname{sign}\delta(t) = -1$, $|\delta(t)| \geqslant \delta_1 > 0$, $\alpha_2^2 < 4\delta_1$ are fulfilled. A. M. Lyapunov (Sobr. soch., t. 2,

Card 1/2

Sufficient conditions for the ...

33866
S/041/62/014/001/007/007
B112/B104

Izd-vo AN SSSR, M.-L., 1956) is referred to. There is 1 Soviet refer-
ence.

SUBMITTED: March 15, 1961

Card 2/2

21.4100

AUTHORS: Shevelo, V. N., Shtelik, V. G. (Kiyev)

TITLE: Theory of the non-autonomous mathematical pendulum

PERIODICAL: Ukrainskiy matematicheskiy zhurnal, v. 14, no. 4, 1962,
372 – 382

TEXT: The equation of the non-autonomous mathematical pendulum $(ml^2x')' + mglf(x) = 0$ is studied for the approximations a) $f(x) \sim x$, b) $f(x) = x - \frac{x^3}{3!}$, c) $f(x) = x - \frac{x^3}{3!} + \frac{x^5}{5!}$ and for d) $f(x) = \sin x$ on the following assumptions: (1) $m(t)$ and $l(t)$ are continuously differentiable for all $t \geqslant t_0 \geqslant 0$; (2) $m(t)$ and $l(t)$ are either limited and positive or $0 < l_1 \leqslant l(t) \leqslant l_2 < \infty$, $m(t)l^2(t) = \exp\left(\int \varkappa(t)dt\right)$, $|\varkappa| \leqslant \alpha_2 < \infty$. A number of theorems supply conditions under which the pendulum describes a rotary, oscillatory or damped motion. The following main results are obtained: if $s(t) = m^2/l^3$ is monotonic then $x = 0$ is a stable equlibrium position

Card 1/2

SHEVELO, V.N. (Kiyev); SHTELIK, V.G. (Kiyev)

On the theory of a nonself-regulating mathematical pendulum.
Ukr. mat. zhur. 14 no.4:372-382 '62.   (MIRA 15:12)
                          (Pendulum)

S/020/63/149/002/006/028
B112/B180

AUTHORS: Shevelo, V. N., Shtelik, V. G.

TITLE: Certain problems concerning the oscillation of solutions
              to non-linear non-autonomous second-order equations

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 149, no. 2, 1963, 276-279

TEXT: For the equation

$$(k(t)x')' + f(x,x',t) = 0 \qquad\qquad (1)$$

the following fundamental problems are investigated: (1) To find out
conditions for $k(t)$ and $f(x,x',t)$ under which all solutions of Eq. (1) are
non-oscillatory, rotational, or oscillatory, respectively. (2) To
determine the regions of non-oscillatory, rotational, and oscillatory
solutions to Eq. (1) for fixed $k(t)$ and $f(x,x',t)$. (3) To derive a law
of variation of the coefficients of Eq-(1) under a given set of initial
conditions, such as would guarantee a given character of oscillation for
the solutions.
Card 1/2

Certain problems concerning the ...

S/020/63/149/002/006/028
B112/B180

ASSOCIATION: Institut matematiki Akademii nauk USSR
(Institute of Mathematics of the Academy of Sciences UkrSSR);
Vychistel'nykh tsentr Akademii nauk USSR
(Computer Center of the Academy of Sciences UkrSSR)

PRESENTED: September 29, 1962, by N. N. Bogolyubov, Academician

SUBMITTED: March 15, 1962

Card 2/2

24,4600

AUTHORS: Shevelo, V.M., and Shtelik, V.H.

TITLE: On the relativistic mechanism of a material point of
              variable mass

PERIODICAL: Akademiya nauk Ukrayins'koyi RSR. Dopovidi, no. 10,
              1962, 1313 – 1316

TEXT: The author considers two partial cases of the equation deri-
ved by N.S. Kalitsin (ZhETF, v. 28, 631, 1955) which is a relativis-
tic generalization of I.V. Meshchers'kyy's basic equation for a ma-
terial point of variable mass. The equations considered are

$$\frac{d}{dt}\frac{m(t)\dot{x}}{(1 - \dot{x}^2/c^2)^{1/2}} + F = 0 \qquad (1')$$

$$m(t)\frac{d}{dt}\frac{\dot{x}}{(1 - \dot{x}^2/c^2)^{1/2}} + F = 0 \qquad (1'')$$

where $m(t)$ is the rest mass, c is the velocity of light in vacuo,
Card 1/2

On the relativistic mechanism of ...   S/021/62/000/010/006/008
D251/D308

and the external force F is assumed of the form $F = r(t)f(x)$. Theorems are proved defining the conditions for uniform oscillation, stability in Lyapunov's sense and the behavior of the amplitude. The stability of the equilibrium position in the case when $m(t)$ is a monotonic function is considered, and the problem of a relativistic pendulum is discussed as an example.

ASSOCIATIONS: Instytut matematyky AN URSR (Institute of Mathematics
of the AS UkrSSR) (V.M. Shevelo); Instytut kiberneti-
ky AN URSR (Institute of Cybernetics of the AS UkrSSR)
(V.M. Shtelik)

PRESENTED: by Yu.O. Mytropol's'kyy, Academician

SUBMITTED: January 2, 1962

Card 2/2

SHEVELO, V.N. [Shevelo, V.M.]; SHTELIK, V.G. [Shtelik, V.H.]

Relativistic mechanics of a material point of variable mass.
Dop. AN URSR no.10:1313-1316 '62.   (MIRA 18:4)

1. Institut matematiki AN UkrSSR i Institut kibernetiki AN
UkrSSR.

SHTELING, G., inzh.

Graders and their use in the construction and repair of roads.
Tekh.v sel'khoz. 19 no.5:26-30 My '59.   (MIRA 12:7)
                 (Graders(Earthmoving machinery))

SHTELING, L.Z., inzhener (Moskva)

The MK-1 full revolving diesel-electric crane. Stroi.pred. neft.
prom.2 no.1:24-26 Ja '57.
                    (Cranes, derricks, etc.)   (MLRA 10:3)

ACC NR.   AT0002616   (A, v)   SOURCE CODE: UR/0413/66/000/023/0130/0130

INVENTOR: Ivanov, V. V.; Shcheglov, G. M.; Spasskiy, K. N.; Karakhan'yan, V. K.; Prudovskiy, B. M.; Semenov, M. I.; Sergeyev, V. A.; Smirnov, I. N.; Britvin, L. N.; Shtel'makh, A. A.

ORG: None

TITLE: An impeller. Class 59, No. 189315 [announced by the All-Union Scientific Research Institute of Hydraulic Machine Building (Vsesoyuznyy nauchno-issledovatel'-skiy institut gidromashinostroyeniya)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 23, 1966, 130

TOPIC TAGS: centrifugal pump, blade profile, metal blade, pump component

ABSTRACT: This Author's Certificate introduces: 1. An impeller for an open centrifugal pump. Pump efficiency is improved and the rigidity of the impeller blades is increased by making the blades in the cylindrical section with a channel shape. The walls of the blade channel are recurved toward the front at a sharp angle to the walls of the pump housing. 2. A modification of this impeller in which the blade channel formed in the cylindrical section has a flat bottom. 3. A modification of this impeller with U-shaped grooves in the flat bottom of the channel on the working side of the blade. These grooves are adjacent to the end surfaces of the blades.

Card 1/2   UDC: 621.671.1-253.5

ACC NR: AP7002616

4. A modification of this impeller equipped with a flat annular rim connected to each blade at the middle of its end sections. 5. A modification of this impeller equipped with flat ribs which connect the middle of the end section on the back side of each blade to the central section of the working side of the following blade.

SUB CODE: 13/ SUBM DATE: 13Jul65

Card 2/2

SHTEL'MAKH, A. D.

Chemical Abst.
Vol. 48 No. 9
May 10, 1954
Soils and Fertilizers

Effect of perennial grasses on the improvement of physico-chemical qualities of the poor, humus-sulfate (Gazhevaya pochva) soils in Samogori. A. D. Shtel'makh and G. K. Akhvlediani (Inst. Soils, Agrochem., Melioration, Acad. Sci. Georgian S.S.R., Tiflis). *Soobshcheniya Akad. Nauk Gruzin. S.S.R.* 13, No. 4, 231–8(1952).—In an attempt to improve phys. properties by accumulation of org. material and creation of structure, 4 grass mixts. were tested against control soil with and without fertilizer: (1) alfalfa + esparto; (2) alfalfa + quack grass; (3) esparto + rye grass; (4) esparto + quack grass. Esparto gave higher yields than alfalfa and left more living and root residues in the upper 20-cm. layer, owing to a better-developed filamentous root system. Mixt. (1) slightly increased porosity in the 15 cm. and 30 cm. depths. No change in soil properties were noted below 30 cm. with any of the mixts. In general these soils were strongly effervescent and contained large amts. of $CaSO_4.2H_2O$ (below 30 cm.). Tables are given showing morphological features, moisture capacity, porosity, and also, by 10 cm. layers, particle size, humus and N content, and bicarbonate, chloride, and sulfate ion content. Mixts. (2) and (4) were best for improving these soils. A. W. D.

SHTEL'MAKH, N.F., inzh.

New method for manufacturing rectangular valve springs.
Khim. i neft. mashinostr. no.3:36 S '64.   (MIRA 17:12)

SHTEL'MAKH, N. I.

"The secretory-excretory function of the stomach in goiter patients treated with 6-methyl thiouracyl." L'vov State Medical Inst. L'vov, 1956. (Dissertations for the Degree of Candidate in Medical Science)

So: Knizhaya letopis', No. 16, 1956

SHTEL'MAKH, N.I., kand.med.nauk

Secretory and excretory functions of the stomach in thyrotoxicosis.
Terap. arkh. 30 no.10:16-19 O '58   (MIRA 11:11)

1. Iz kafedry terapii (zav. - prof. L.T. Malaya) sanitarno-
gigiyenicheskogo fakul'teta Khar'kovskogo meditsinskogo instituta
            (HYPERTHYROIDISM, physiology,
                gastric juice secretion & stomach motor funct. (Rus))
            (STOMACH, in var. dis.
                hyperthyroidism, motor funct. (Rus))
            (GASTRIC JUICE,
                secretion in hyperthyroidism (Rus))

SHTEL'MAKH, N.I.

Secretory function of gastric glands in patients with thyro-
toxicosis treated with 6-methylthiouracil. Probl.endok.i gorm.
7 no.2:80-84 '61.   (MIRA 14:5)
       (HYPERTHYROIDISM)   (URACIL)   (GASTRIC JUICE)

SHTEJ'MAKH, N.I., dotsent

Diagnosis of the preclinical stage of atherosclerosis. Kardio-
logiia 5 no.2:69-73 '63   (MIRA 17:2)

1. Iz kafedry propedevtiki vnutrennikh bolezney pediatricheskogo
fakul'teta (zav. - prof. Yu.D.Shul'ga) Khar'kovskogo meditsin-
skogo instituta.

SHTEL'MAKH, N.I., dotsent

Disorders in vascular tone and some metabolic indices in young
persons. Terap. arkh. 35 no.9:67-76 S'63   (MIRA 17:4)

1. Iz kafedry propedevtiki vnutrennikh bolezney (zav. - prof.
Yu.D.Shul'ga) pediatricheskogo fakul'teta Khar'kovskogo medi-
tsinskogo instituta.

KORNIYENKO, A.M.; SHTEL'MAKHOV, M.S.; GEYLER, Z.Sh.; BERESNEV, V.A.;
    KOTLIK, S.B.; GORFINSKIY, Kh.M.; ZEL'DIN, Yu.R.; KURGIN, Yu.M.;
    BELYAYEV, V.G.; ZAK, P.S.; ZAYTSEV, A.A.; LI, A.M.; SKVORTSOV, L.N.;
    LUTTS, R.R.; KHVINGIYA, M.V.; NINOSHVILI, B.I.; SEMENCHENKO, D.I.;
    SUKHANOV, V.B.

Soviet inventions in mechanical engineering. Vest.mashinostr.
45 no.11:87-88   N '65.   (MIRA 18:12)

KORNIYENKO, A.M.; SHTEL'MAKHOV, M.S.; GEYLER, Z.Sh.; TSYRUL'NIKOV, I.M.;
    SHLEYFER, M.L.; PELIKS, A.Ya.; BRONSHTEYN, V.S.; BERESNEV, V.A.;
    KUZAKHMETOV, Sh.G.; STARKOV, V.T.; VARAKSA, A.P.; ZHELEZNYAKOV,
    V.V.; STEL'MAN, L.N.; SUKHANOV, V.B.

Authors' certificates and patents. Mashinostroenie no.6:101-102
                                              (MIRA 18:12)
N-D '65.

LEVI, M.I.; VAL'KOV, B.G.; SHTEL'MAN, A.I.; KANATOV, Yu.V.

Experimental plague among different populations of southern gerbils
(M.meridianus Pall.). Sbor. nauch. rab. Elist. protivochum. sta.
no. 1:43-64 '59.   (MIRA 13:10)
      (COLGA DELAT REGION—PLAGUE)   (BERBILS)

SHTEL'MAN, A. I., KANATOV, YU. V., LEVI, M. I. and VAL'KOV, B. G.

    "Experimental Plague in Different Populations of Meridional Voles."

Tenth Conference on Parsitological Problems and Diseases with Natural
Reservoirs, 22-29 October 1959, Vol. II, Publishing House of Academy of
Sciences, USSR, Moscow-Leningrad, 1959.

Elistinskaya Anti-Plague Station

SHTEL'MAN, A.I.

Use of cortisone for the diagnosis of latent plague infections.
Report no.1:Diagnosis of latent plague infection in gerbils
(Meriones meridianus Pall.) with the aid of cortisone-treated
white mice. Zhur.mikrobiol.epid.i immun. 31 no.2:39-44 F '60.
(MIRA 13:6)

1. Iz Astrakhanskoy protivochumnoy stantsii.
        (PLAGUE veterinary)
        (CORTISONE pharmacol.)

LEVI, M.I.; NOVIKOVA, Ye.I.; MINKOV, G.B.; OPTYAKOVA, A.F.; SHTEL'MAN, A.I.;
     KANATOV, Yu.V.

     Serological studies in plague. Report No.1: Detection of antibodies
     in sera of experimentally infected animals by means of the passive
     hemagglutination on reaction. Zhur.mikrobiol., epid. i immun. 32
     no.10:86-91 O '61.   (MIRA 14:10)

     1. Iz Astrakhanskoy i Elistinskoy protivochumnykh stantsiy.
               (PLAGUE)   (BLOOD—AGGLUTINATION)
               (ANTIGENS AND ANTIBODIES)

SHTEL'MAN, A.I.

Use of cortisone for the purpose of detecting latent plague infection.
Report No. 2: Diagnosis of plague infection in gerbils (Meriones
meridianus Pall.) by provoking it using cortisone. Zhur.mikrobiol.,
epid.i immun. 32 no.12:113-114 D '61.   (MIRA 15:11)

1. Iz Astrakhanskoy protivochumnoy stantsii.
                (CORTISONE)   (PLAGUE)

LEVI, M.I.; ZININ, P.I.; SHTEL'MAN, A.I.; SHIRYAYEV, D.T.; MIRONOV, N.P.;
CHIKRIZOV, F.D.

Hereditary resistance to plague in Meriones meridianus. Bul.
eksp. biol. i med. 56 no.7:75-79 Jl'63   (MIRA 17:3)

1. Iz Rostovskogo-na-Donu nauchno-issledovatel'skogo protivo-
chumnogo instituta i Astrakhanskoy protivochumnoy stantsii.
Predstavlena deystvitel'nym chlenom AMN SSSR N.N. Zhukovym-
Verezhnikovym.

KALABUKHOV, N.I.; SHIROKOVA, G.P.; SHTEL'MAN, A.I.

Effect of vitamins C and E on the physiological characteristics and sensitivity of the gerbil Meriones meridianus to plague infection. Zhur. mikrobiol., epid. i immun. 40 no.4:102-107 Ap '63.

(MIRA 17:5)

1. Iz eksperimental'noy bazy Instituta "Mikrob" i Astrakhanskoy protivochumnoy stantsii Ministerstva zdravookhraneniya SSSR.

SHTEL'MAN, A.I.

Experimental study of the mechanism of transmission of plague among the gerbils Meriones medidianus Pall. and M. tamariscinus (Pall.) from the Volga-Ural interfluve. Report No.4: Supplement to the problem of the infection of fleas parasitic on the gerbil Meriones meridianus. Med. paraz. i paraz. bol. 32 no.6:739-740

(MIRA 18:1)

N-D '63

1. Iz Astrakhanskoy protivochumnoy stantsii Ministerstva zdravo-okhraneniya SSSR.

LEVI, M.I.; SUCHKOV, Yu.G.; ORLOVA, G.M.; GERASYUK, L.G.; SHKODA, A.M.;
PEYSAKHIS, L.A.; STOGOVA, A.N.; LOPATINA, N.F.; SUKHARNIKOVA, N.A.;
PAK, G.Yu.; MUMINOV, K.M.; DONSKAYA, T.N.; MASSONOV, L.G.; VEYNBLAT,
V.I.; MURTAZANOVA, E.Sh.; SHTEL'MAN, A.I.; LAVRENT'YEV, A.F.;
BASOVA, N.N.; GOLKOVSKIY, G.M.; KULOV, G.I.; SALAMOV, N.I.;
ZALYGINA, N.I.

Results of the testing of the reactions of passive hemagglutination
and neutralization of antibodies in the epizootologic examination of
wild rodents for plague. Zhur. mikrobiol., epid. i immun. 40 no.12:
118-119 D '63.   (MIRA 17:12)

1. Iz Rostovskogo i Sredne Aziatskogo protivochumnykh institutov,
Chimkentskoy, Taldy-Kurganskoy, Aralomorskoy, Turkmenskoy, Astrakhanskoy
i Frunzenskoy protivochumnykh stantsiy.

PREMET, G.K.; VASILINETS, I.M.; TITENKO, V.M., inzh.; KOROSTELEV, V.M., inzh.; SHTEL'MUKHOVA, Ye.V., inzh.

Device for the removal of harmful wastes in the production of "oksol" drying oil. Masl.-zhir. prom. 29 no.10:30-33 O '63.
(MIRA 16:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zhirov (for Premet, Vasilinets). 2. Georgiyevskiy masloekstraktsionnyy zavod (for Titenko, Korostelev, Shtel'mukhova).

SHUR, Ya.S.; SHTEL'TS, Ye.V.; KANDUROVA, G.S.

Magnetic properties of magneto-anisotropic specimens of ferro-
magnetic powders. Part 4: Temperature dependence of magnetic
properties of MnBi powder alloy specimens. Fiz. met. i metallo-
ved. 6 no.3:420-425 '58.   (MIRA 11:10)

1. Institut fiziki metallov Ural'skogo filiala AN SSSR.
       (Bismuth compounds--Magnetic properties)
  (Powder metallurgy) (Metals, Effect of temperature on)

SHTEMBERG, M. I., Cand Med Sci — (diss) "Experience in work on organization of obstetric and gynecological aid in a rural rayon. (According to data of Strashenskiy Rayon of MSSR.)" Kishinev, 1958. 20 pp (Min of Health Moldavian SSR, Kishinev State Med Inst), 300 copies (KL, 17-58, 112)

SHTENBERG, M.I. (MSSR, r.Strasheny, Pochta, do vostrebovaniya)

Organization of mass preventive oncological examinations of the female
inhabitants in a rural district [with summary in English]. Vop.onk.
4 no.4:498-500 '58   (MIRA 11:9)

1. Iz Strashenskoy rayonnoy bol'nitsy Moldavskoy SSR (glav. vrach
Yu.P. Chernova, nauchn. rukovod. raboty - prof. A.Z. Kocherginskiy)
              (GENITALIA, FEMALE, neoplasms
                    diag. mass survey of women in rural area (Rus))

SHTEMBERG, M.I., rayonnyy akusher-ginekolog

Result of dispensary service of leading groups of women in a rural area. Akush. i gin. 34 no.3:86-88 My-Je '58.   (MIRA 11:6)

1. Iz Strashenskoy rayonnoy bol'nitsy (glavnyy vrach Yu.P.Chernova) Moldavskoy SSR.
            (GYNECOLOGICAL DISEASES, prev. & control,
                outpatient rural serv. (Rus))

SHTEMBERG, M.I.

Use of micarene for treating asphyxia in newborns. Zdravookhranenie
4 no.6:17-19 N-D '61.   (MIRA 15:2)

1. Iz kafedry akusherstva i ginekologii (zav. - prof. A.Z.Kocherginskiy)
Kishinevskogo meditsinskogo instituta.
          (ASPHYXIA)   (INFANTS (NEWBORN)) (STIMULANTS)

KOCHERGINSKIY, A.Z., prof.; SHTEMBERG, M.I., kand. med. nauk;
     SHCHETININA, Ye., red.; BELOUSOVA, L., tekhn. red.

[Obstetric and gynecological aid in Moldavia] Akushersko-
ginekologicheskaia pomoshch' v Moldavii. Kishinev, Kartia
moldoveniaske, 1962. 72 p.   (MIRA 15:6)
        (MOLDAVIA—OBSTETRICS) (MOLDAVIA—GYNECOLOGY)

SHTEMBERG, M.I.

Complications in births of a large fetus and measures for their
decrease. Trudy Kish.gcs.med.inst. 13:183-186 '60.
                                                    (MIRA 16:2)

1. Kafedra akusherstva i ginekologii Kishinevskogo gosudarst-
vennogo meditsinskogo instituta.
                        (LABOR (OBSTETRICS))

SHTEMBERG, M.I., kand. med. nauk; KOROLEV, K., red.

[Obstetric science in control of the health of mother
and child] Akusherskaia nauka v bor'be za zdorov'e ma-
teri i rebenka. Kishinev, Kartia moldoveniaske, 1965.
58 p.   (MIRA 18:7)

ACC NR: AP6025078   SOURCE CODE: UR/0115/66/000/006/0066/0068

AUTHOR: Vukolov, V. I.; Yerdakov, V. B.; Parfenov, N. A.; Shtemberg, S. V.

ORG: none

TITLE: Ionization chamber used for measuring high gas pressure

SOURCE: Izmeritel'naya tekhnika, no. 6, 1966, 66-68

TOPIC TAGS: ionization chamber, high pressure, high pressure research, pressure measurement, GAS PRESSURE

ABSTRACT: The I-V characteristic of a plane-parallel ionization chamber (ICh) is described by a well-known J. Boag et al. formula (Brit. J. Appl. Phys., 1952, 3, 222). According to that formula, with pressures over 10^6 n/m^2 and neglecting the effects of columnar recombination, for current undersaturation conditions ($f < 0.05$, $\eta > 50$), this relation is approximately true: $f \approx 1/\eta \approx 1/p$; $i = i_0 f = $ const. If the columnar recombination is taken into account, then: $\eta \approx \sqrt{p}$, $f \approx 1/\eta$, $i = p^{-\frac{1}{2}}$. An experimental device (see figure) consisted of a steel body 1 that housed cylindrical ICh 2 having a volume of 6.2 cm^3. The ICh two brass electrodes were separated by teflon insulator 7.
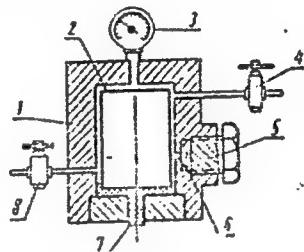
UDC: 621.387.422:531.787

Card 1/2

ACC NR: AP6025078

Valves 4 and 8 served for building up and reducing pressure of tritium-labeled commercial hydrogen in the ICh. The experimental results show that: (1) The current undersaturation conditions in an ICh can be used for measuring high pressures; (2) Both radioactive-isotope gases and labeled stable gases can be measured; (3) Conventional radioactive ionization manometers operated in the undersaturation range can be used for measuring high pressures of nonradioactive gases; (4) Some gases (very pure Ar or He) cannot be measured by this method. Orig. art. has: 3 figures and 6 formulas.   [03]

SUB CODE: 13, 09 / SUBM DATE: none / ORIG REF: 008 / OTH REF: 005/   ATD PRESS:
                                                                              5057

Card 2/2   hs

SHTEMENKO, L. S. and GRIBKOVA, S. I.

"Experimental study of slippage and temperature jump in the course of rarefied air flow about a solid wall."

Report presented at the 1st All-Union Conference on Heat- and Mass- Exchange, Minsk, BSSR, 5-9 June 1961

GRIBKOVA, S.I.; SHTEMENKO, L.S.

Study of the temperature jump during the flow of rarefield air
close to a hard wall. Vest.Mosk.un.Ser.3.Fiz., astron. 17
no.2:11-19 Mr-Ap '62.   (MIRA 16:2)

1. Kafedra molekulyarnoy fiziki Moskovskogo universiteta.
            (Gas flow)   (Aerodynamic heating)

GRIEKOVA, S.I.; SHTEMENKO, L.S.

Estimate of terms of second-order approximation in testing abrupt
temperature changes. Vest. Mosk. un. Ser. 3: Fiz., astron. 18
no.3:11-17 My-Je '63.   (MIRA 16:10)

1. Kafedra molekulyarnoy fiziki Moskovskogo universiteta.

SHTEMENKO, O. B

CA

21

PROCESSES AND PROPERTIES INDEX

The production of coke from the Far Eastern Region coal deposits. S. I. Zolotov and O. V. Shtemenko. *Coke and Chem.* (U. S. S. R.) 1939, No. 7, 4-6; *Khim. Referat. Zhur.* 1939, No. 11, 98.—Coals from the Burenin and Suchan deposits were coked in ovens of 200 and 150 kg. capacity. The enriched Suchan coals with 8% of admixts. produced a fused, dense coke. The same results were obtained from the "chelonyk" layer of the Burenin coal deposits. Low-grade and medium-grade cokes were obtained from the ordinary coals of the "Verkhnyaya El'ga" and the "Sivak" coal layers. Qual indexes of the Sakhalin coals are given. W. R. Henn

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION
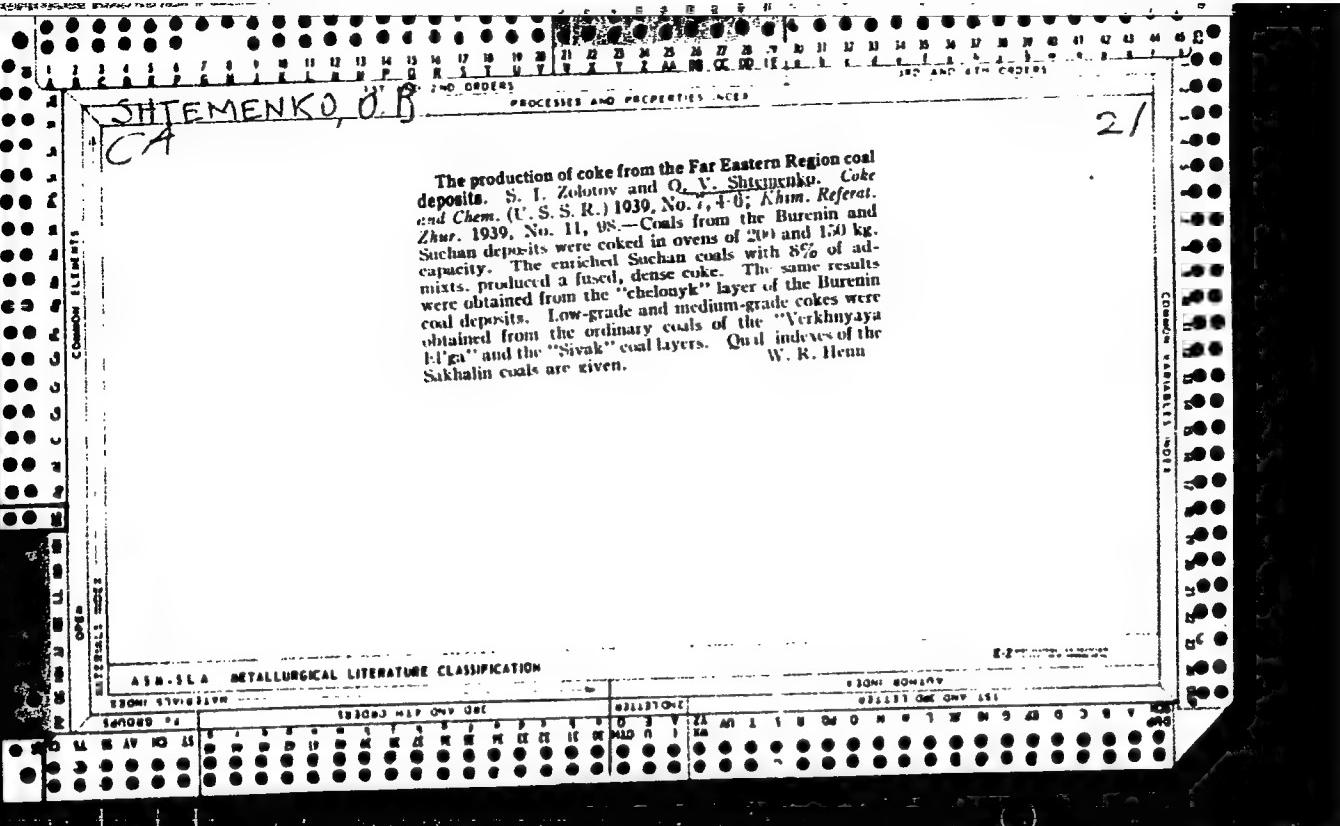
AUTHOR: Shtemenko, O.B.   68-1-2/21

TITLE: The Quality of Coals from New Sectors of the Karaganda
           Basin. (Kachestvo ugley novykh rayonov Karagandinskogo
           basseyna.)

PERIODICAL: Koks i Khimiya, 1957, No.1, pp. 5 - 7 (USSR)

ABSTRACT: During the last few years, geological-prospecting work
           on some new sectors of the Karagandinsk Basin indicated the
           presence of coals valuable for their caking and washing prop-
           erties. Of these the following sectors are of particular
           importance: Dolinsk, Karadzharo-Shakhansk and Tenteksk, where
           deposits of the Dolinskaya series are spread, consisting of 11
           seams of various thickness and structure. The washability and
           properties of the above coals is given in Table 1. The results
           of experimental semi-industrial coking are given in Table 2.
           The results obtained indicated that a high quality metallurg-
           ical coke can be produced from the above coals.
           There are 2 tables.

ASSOCIATION: VUKhIN

AVAILABLE:
Card 1/1

SHTEMLER, M.Ye.; SVERDLOVA, G.M., redaktor; DVORKINA, B.A., redaktor.

[Aviation industry in foreign countries; a collection of transla-
tions and references] Aviatsionnaia promyshlennost' zarubezhnykh
stran; sbornik perevodov i referatov. Sostavil M.E. Shtemler.
Pod obshchei red. G.M.Sverdlova i B.A. Dvorkina.[n.p.] Izd-vo BNT
No.5 [Economic aspects of transport planes] Problemy ekonomich-
nosti transportnykh samoletov. 1946. 57 p. [microfilm]   (MLRA 8:9)

1. Russia (1923- U.S.S.R.) Ministerstvo aviatsionnoy promyshlen-
nosti. Byuro novoy tekhniki.
        (Aeronautics, Commercial)

SHTEMPEL', A.N.

Bending reflexes of the fingers with the forearm. in a. supine position. A.N. Shtempel'. Zhur. nevr. i psikh. 56 no.1 '56

(MLRA 9:4)

1. Kafedra nervnykh bolezney (zav. professor Ye. L. Venderovich [deceased]) Leningradskogo meditsinskogo instituta imeni I.P. Pavlova.   (REFLEXES)   (FINGERS)

SHTEMPEL', A.N.

Problem of disseminated spongioblastoma multiforme [with summary in French]. Zhur.nevr. i psikh. 57 no.4:504-507 '57. (MIRA 10:7)

1. Kafedra nervnykh bolezney (zav. - prof. D.K.Bogorodinskiy) I Leningradskogo meditsinskogo instituta imeni I.P.Pavlova.
        (GLIOMA, case reports,
            brain, spongioblastoma multiforme (Rus))
        (BRAIN NEOPLASMS, case reports,
            spongioblastoma multiforme (Rus))

SHTEMPEL', A.N., EPSHTEYN, A.A.

Treatment of diseases of the nervous system by prolonged use
of novocaine. Vrach.delo no.7:40-42 Jl '60.   (MIRA 13:7)

1. Klinika nervnykh bolezney (zav. - prof. D.K. Bogorodinskiy)
Pervogo Leningradskogo meditsinskogo instituta.
          (NERVOUS SYSTEM--DISEASES) (NOVOCAINE)

SHCHEPETEL', B. M.

Representatives of upper Carboniferous flora in the coastal region
of the Sea of Okhotsk. Bot.zhur. 41 no.5:696-702 My '56. (MLRA 10:7)
(Okhotsk region--Ayano-Mayskiy District--Paleobotany)

AUTHOR   SHTEMPEL, B.M,   20-5-51/60
TITLE   The Age of the Conglomerates of the Metamorphic Stratum of the
              Sredinnyy mountain Ridge of Kamchatka.
              (Vozrast konglomeratov metamorficheskoy tolshchi Sredinnogo khre-
              bta Kamchatki -Russian)
PERIODICAL   Doklady Akademii Nauk SSSR,1957,Vol 114,Nr 5,pp 1o99-11oo(U.S.S.R.)

ABSTRACT   The author received a small collection of plant fossils from the
              mentioned region.It consists only of three samples,but is neverthe-
              less of great interest,since it sheds light upon the age of the se-
              diments which make up the core of the fold-formations which have
              always been considered as belonging to the Paleozoic or even to
              the Archaeozoic ones.They are CEphalotaxopsis cf.intermedia Hollick,
              Taxodium sp., Glyptostrobus europaeus Heer,Phyllites (cf.Corylop-
              sis orientalis Borsuk) and Ph.sp. They were found about 2o km from
              the mouth,above the source,on the right bank of the river Zimka,
              of the left tributary of the Icha,about 1oo km air line distance
              from the mouth of the latter.The geologists of the Kamchatka ex-
              pedition of the Far Eastern Geological Administration consider
              the layers as belonging to the Higher Kompak suite of the Archeo-
              zoic or to the Conglomerate suite which lies below the Malkin sui-
              te of the Paleozoic.By an investigation of the Conglomerate suite
              the conclusions by A.V.Shcherbakov on the conglomerates which are
              deposited in form of an island amidst Paleozoic rocks in the upper
Card 1/3   course of the river Oblukovina are disproved,as well as their re-

20-5-51/60

The Age of the Conglomerates of the Metamorphic Stratum of the Sredinnyy Mountain Ridge of Kamchatka.

lationship with the Neogene and even the Pliocene.The plant fossils can but indicate that they belong to the lower parts of the Tigil series of the Eocene,most probably to the Paleocene.This is confirmed by the results of petrological studies.In recent times the opinion that granites are of the age of the Alps has been more and more confirmed.Therefore there is no reason to doubt the Tertiary age of the conglomerates which belong to metamorphic rocks.The assumption that the conglomerates are deposited in form of an island amidst the Paleozoic is without any foundation.The Paleocenic age of the conglomerates gives rise to doubts concerning a number of assumptions established among far eastern geologists,if it does not disprove them entirely,namely,that in the middle part of the middle ridge the Tertiary deposits are only represented by their upper part. Now that the Paleogenic age of part of the metamorphic rocks has been found out,one can and must demand a revision of the problem of distribution of Paleogenic carboniferous sediments south of Krugogory,which were hitherto considered as the southern boundary of coal deposits in this district.It might be possible that the carboniferous Paleogenic sediments are continued farther in the south,however,not within the elevations of the mountainous Kamchatka region but in the flat region.Here the Paleogenic strata might lie below the Neogenic ones and could there-

Card 2/3

20-5-51/60

The Age of the Conglomerates of the Metamorphic Stratum of the Sredinny mountain Ridge of Kamchatka.

fore only be found by deep borings.
(8 Slvic references).

ASSOCIATION   Laboratory for Coal Geology of the Academy of Sciences of the USSR
PRESENTED BY   NALIVKIN D.B.,Member of the Academy
SUBMITTED   17.1.1957
AVAILABLE   Library of Congress.
Card 3/3

SHTEMPEL', B.M.; VERBITSKAYA, Z.I.

Distribution of fossil flora in cross sections of Suchan Basin
coal-bearing formations. Trudy Lab.geol.ugl. no.8:262-273
'58.   (MIRA 11:12)
                (Suchan Basin—Paleobotany)

SHTEMPEL', B.M.

Habitat of first angiosperms. Bot. zhur. 44 no.7:967-968 Jl '59.
(MIRA 12:12)

1.Laboratoriya geologii uglya AN SSSR, Leningrad.
(Sakhalin--Angiosperms, Fossil)

3(5), 17(4)   SGV/2o-127-3-54/7?

AUTHOR: Shtempel', B. M.

TITLE: The Development Stages of the Cretaceous Flora of South Primor'ye

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 127, Nr 3,
             pp 665 - 668 (USSR)

ABSTRACT: The stratigraphy of the region mentioned in the title was
             mainly based on palaeophytological data. A survey of the hitherto
             existing history of the investigation of vegetation complexes
             (Refs 3,4) is given. In 1954 - 58 the author collected numerous
             floral remnants characteristic of the entire section of the
             Nikanskiy stage as well as of strata surpassing the original
             borders of this stage. Yu. G. Mirolyubov and, to a certain ex-
             tent, the author collected remnants of terrestrial plants and
             hydrophytes from underneath the base of the coal-bearing sedi-
             ments of the Suchanskiy section.The detection of these plant
             remnants together with the detection of a fauna containing Valan-
             ginia and Aucella solved the problem of the Valanginian age of
             this flora. These remnants were classified as standard fossils.
             K. M. Khudoley found a leaf of a sago-like plant (Ctenis densi-
Card 1/4   nervis Racib., according to the author's classification) together

The Development Stages of the Cretaceous Flora of   SOV/2o-127-3-54/7:
South Primor'ye

with Upper Tithonian ammonites and other molluscs on the
Putyatin Island so that the time of stratification can be de-
termined with great preciseness. R. I. Sokolov found numerous
vegetable remnants together with Valanginian and Tithorian
faunas, in the southern part of the Tetyukhinskiy district
along the river Sibaygou (right tributary of the river Tadusha).
The Suchan flora is characterized by an abundance of conifers
and scarceness of sago-like plants; the contrary is the case
with the flora along the river Sibaygou. By comparison of these
two floras their inheritance beginning with the Valanginian can
be determined. Thus there was no considerable interruption
during the development of these floras. It is justified to ob-
serve the Cretaceous flora from the very beginning of Cretaceous
and to follow it up to the end of the Suchan sedimentation. In
the region of the three coal-bearing suites the author found
a separation of the Lower Cretaceous floras into a) Nikanskaya
and b) Bokhayskaya. The first one is represented by the rem-
nants of two lower suites of the Suchan section, whereas the
second one consists of remnants of the lower (North Suchan)
suite. The change of the composition, the extinction of the

Card 2/4

The Development Stages of the Cretaceous Flora of   SOV/2o-127-3-54/71
South Primor'ye

Nikanskiye varieties, and the formation of the Bokhayskiye
varieties took place during the formation of the middle (Old
Suchan) suite. At the end of the formation of the North Suchan
suite this undisturbed development was interrupted by the trans-
gression of the Albian-Senoman Sea. It left a small mass of
marine and lagoon sediments after its regression. By further ob-
servations of the development of the Cretaceous flora the author
detects their remnants found in the Dostoyevskoye coal deposits.
Here the replacement of the Bokhayskaya flora by the Gilyats-
kaya flora can be observed. A transition like the above-mentioned
is found also here. The author continues his survey up to the
Partizanskaya suite (collections by R. I. Sokolov). Its flora
is clearly determined as Senon-Danian. There are 9 Soviet refer-
ences.

ASSOCIATION: Laboratoriya geologii uglya Akademii nauk SSSR (Laboratory for
the Geology of Coal of the Academy of Sciences, USSR)

Card 3/4

SHTEMPEL', B.M.

Phytostratigraphy of the Cretaceous system in southern Maritime
Territory. Trudy Lab. geol. ug¹. no.10:167-193 '60. (MIRA 13:9)
(Suchan Basin—Geology, Stratigraphic)

SHTEMPEL', B.M.

Discovery of Amurian Flora in southern Maritime Territory. Dokl.
AN SSSR 144 no.1:212-215 My '62.   (MIRA 15:5)

1. Laboratoriya geologii uglya AN SSSR. Predstavleno akademikom
D.V.Nalivkinym.
              (Martime Territory--Paleobotany)

VOLKOVA, I.B.; NALIVKIN, D.V.; SLATVINSKAYA, Ye.A.; BOGOMAZOV, V.M.;
GAVRILOVA, O.I.; GUREVICH, A.B.; MUDROV, A.M.; NIKOL'SKIY, V.M.;
OSHURKOVA, M.V.; PETRENKO, A.A.; POGREBITSKIY, Ye.O.; RITENBERG,
M.I.; BOCHKOVSKIY, F.A.; KIM, N.G.; LUSHCHIKHIN, G.M.; LYUBER,
A.A.; MAKEDONTSOV, A.V.; SENDERZON, E.M.; SINITSYN, V.M.; SHORIN,
V.P.; BELYANKIN, L.F.; VAL'TS, I.E.; VLASOV, V.M.; ISHINA, T.A.;
KONIVETS, V.I.; MARKOVICH, Ye.M.; MOKRINSKIY, V.V.; PROSVIRYAKOVA,
Z.P.; RADCHENKO, O.A.; SEMERIKOV, A.A.; FADDEYEVA, Z.I.; BUTOVA,
Ye.P.; VERBITSKAYA, Z.I.; DZENS-LITOVSKAYA, O.A.; DUBAR', G.P.;
IVANOV, N.V.; KARPOV, N.F.; KOLESNIKOV, Ch.M.; NEFED'YEV, L.P.;
POPOV, G.G.; SHTEMPEL', B.M.; KIRYUKOV, V.V.; LAVROV, V.V.;
SAL'NIKOV, B.A.; MONAKHOVA, L.P.[deceased]; MURATOV. M.V.;
GORSKIY, I.I., glav. red.; GUSEV, A.I., red.; MOLCHANOV, I.I.,
red.; TYZHNOV, A.V., red.; SHABAROV, N.V., red.; YAVORSKIY, V.I.,
red.; REYKHERT, L.A., red.izd-va; ZAMARAYEVA, R.A., tekhn. red

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glav. red. V.V.Mokrinskii. Chleny red. kollegii: F.A.Bochkovskiy
i dr. Moskva, Izd-vo Akad. nauk SSSR, 1962. 17 p.
                                        (MIRA 16:3)

1. Akademiya nauk SSSR. Laboratoriya geologii uglya. 2. Chlen-
korrespondent Akademii nauk SSSR (for Muratov).
                 (Coal geology—Maps)

VERBITSKAYA, Zoya Ivanovna; DZENS-LITOVSKAYA, Ol'ga Alekseyevna;
    SHTEMPEL', Boris Mikhaylovich; LYUBER, A.A. st. nauchn.
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SHTEMPEL', Viktor Yevgen'yevich, assistent; VOROTNIKOVA,
R.V., red.; BERNGARDT, N.Ye., tekhn. red.

[Mineral wealth of Voronezh Province] Poleznye iskopaemye Vo-
ronezhskoi oblasti. Voronezh, Voronezhskoe knizhnoe izd-vo,
1961. 74 p.   (MIRA 15:2)

1. Kafedra geologii Voronezhskogo sel'skokhozyaystvennogo in-
stituta (for Shtempel').
          (Voronezh Province—Mines and mineral resources)

SHTEMPEL', Ye.P., inzh.

  Devices for the automatic control of high-frequency protection
  channels. Elek. sta. 33 no.8:77-79 Ag '62. (MIRA 15:8)
    (Electric power distribution—Electronic equipment)
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SHTEMPROK, M.

Reviews and bibliography. Vest. AN Kazakh. SSR 21 no.5:92 My '65.
(MIRA 18:7)

Shtenbek, B

Category : USSR/Electricity - Semiconductors

G-3

Abs Jour : Ref Zhur - Fizika, No 2, 1957, No 4226

Author : Shtenbek, B., Baranskiy, P.
Title   : Investigation of the Peltier Effect and of the Thermoelectromotive
          Forces in Germanium.

Orig Pub : Zh. takhn. fiziki, 1956, 26, No 3, 683-685

Abstract : Doubt is raised concerning the reliability of the quantities P (Peltier
           heat) and τ (Thomson coefficient) obtained from a known value of α using
           the equations $\dfrac{dP}{dT} - \alpha - \tau = 0, \dfrac{dP}{dT} - \dfrac{P}{T} - \tau = 0$

           To check the equations, P and α were determined experimentally. The
           resultant values of P (T) and αT $= f$ (T) do not agree within the ex-
           perimental accuracy limits, so that thermoelectric phenomena cannot
           be considered reversible.

Card   : 1/1

SHTENBEK, M.;BARANSKIY, P.I.

Investigating the Peltier effect and thermoelectromotive forces in germanium Izv. AN SSSR. Ser. fiz. 20 no.12:1491-1493 D '56.

(MIRA 10:3)

1. Institut fiziki Akademii nauk USSR.
(Germanium-Electric properties)

SHTENBEK, M.

An attempt to determine an increase of the charge carrier temperature caused by an electric field in germanium. M. Shtenbek. Izvest. Akad. Nauk S.S.S.R., Ser. Fiz. 20, 1560—2(1956).—Nonuniform c.d. distribution in a semiconductor causes the appearance of a special type of thermoelec. e.m.f., U, which was measured by means of probes on specially cut Ge. It can be calcd., that in order to raise the temp. of the electron gas by 1° at room temp., an increase of the elec. field of 4–6 v./cm. is required. An increase of the same order of magnitude can be theoretically derived. S. Pakswer

MT

SHTENBEK, M.

537.311.33 : 546.289 : 537.32   826

**An Investigation of the Peltier Effect
and Thermoelectric Forces in Ger-
manium.** M. Shtenbek & P. I. Baranskii.
(*Zh. tekh. Fiz.*, March 1956, Vol. 26, No. 3,
pp. 683–685.) The fundamental equations
(1) and (2) relating the Peltier heat,
Thomson coefficient and differential thermo-
e.m.f. to one another do not necessarily
follow from the first two laws of thermo-
dynamics and therefore the first two of these
quantities cannot be determined uniquely
from measured values of the thermo-e.m.f.
A method has been developed for direct
measurement of the Peltier heat at a Ge-Cu
contact. Some experimental curves are
shown, and theoretical implications are
discussed.

SHTENBEK, M.

		CARD 1 / 2	PA - 1206

SUBJECT   USSR / PHYSICS
AUTHOR   SCHTENBEK, M., BARANSKIJ, P.I.
TITLE   The Methods employed for the Precise Measuring of the PELLETIER-
            Effect and of Thermoelectromotoric Forces.

PERIODICAL Zurn. techn. fis, 26, 1373-1388 (1956)
            Publ. 7 / 1956   reviewed 8 / 1956

The methods employed for measuring the PELLETIER voltage P and thermoelectro-
motoric force by means of which the formula $P = \alpha T$ was checked on a semicon-
ductor are described. Tests did not confirm the formula $P = \alpha T$. The method
worked out here is a further development of the Jordan method. As it is im-
possible to produce fully symmetrical heat resistances, a method was worked
out which is indifferent in this respect. At first, the case of a homogeneous
sample with a constant electric resistance which is independent of the current i
is investigated. This is followed by a case in which the resistance depends on i.
Finally, there follows the case of an inhomogeneous sample. Investigation was
based on the method of intersecting curves: P was measured with a given T_o. At
first, this was done for i = + 110 mA, and the readings on the galvanometer
n_1' and n_2', which correspond to the two heating powers W_1' and W_2', were noted.
The same happened in the case of i = - 110 mA. The graphical representation
of $\Delta T(W_1)$ and $\Delta T(W_2)$ resulted in straight lines which intersected at a
point S. Deviation from the straight line was not more than from 1 to 1,5% in

SHTENBEK, M

The Peltier effect and thermoelectric force in germanium. M. Shtenbek and P. I. Baranskii. Soviet Phys. Tech. Phys. 1, 659-61 (1957)(English translation).—See C.A. 51, 17a.

B. M. R

ABSTRACT   The purpose of the experiments and the experimental order are first dis-
cussed. The study of the motion of the injected holes which reach the
collector permit the following measurement. a) the time of flight t_1 and
the mobility μ, b) the diffusion in the longitudinal direction that is
vertical to the electric field. From the attached diagrams the deviations
of the electrometers are to be seen as a function of frequency. A table
shows the measuring values for transitions through zero, the flying times,
and mobilities. Experiments are typically characterized by the dependence
of the deviation of the electrometer on the size of the magnetic trans-
versal field. Summarizing the following conclusions are drawn. 1) a zero-
method was worked out for the accurate measuring of mobility in the case
of the exclusion of influence exercised by surfaces, 2) methods for the
measuring of the coefficients of longitudinal- and transversal diffusion
were worked out. 3)Quantitatively (with an accuracy of $1^o/o$) the inde-
pendence of mobility of the voltage of the electric field (in the inter-
val of $2 \leqslant E \leqslant 10$ V/cm) has been confirmed for the case of Ge of the type
"n". 4)It was shown that mobility in the direction E and the coefficients
of longitudinal diffusion obey the Einstein relation. 5) It was found
that the coefficient of transversal diffusion is considerably greater

Card   1/2

PA - 2116

Investigation of the Minority Current Carriers Movement in Germanium.

than that of longitudinal diffusion (Influence exercised by anisotropy?). 6) In the case of experiments in which the presence of slight holes to the amount of $\approx$ 0,5°/o of their total number might have been recorded, their presence could not be observed. (8 illustrations, 1 table)

ASSOCIATION   Physical Institute of the Academy of Science of the U.S.S.R., Kiev.
PRESENTED BY
SUBMITTED
AVAILABLE   Library of Congress

Card 2/2

PA - 2117

AUTHOR   SHTENBEK, M., BARANSKIY, P.I.
TITLE   Experimental Study of the Interrelations between the Pelletier Effect
              and the Thermoelectromotoric Forces in Germanium (Eksperimentaljnoe
              izucheniye vzaimosvyazi effekta Peljtje i termoelektrodvizhushchikh
              sil v germanii).

PERIODICAL   Zhurnal Tekhn. Fiz., 1957, Vol 27, Nr 2, pp 233-237 (U.S.S.R.)
              Received 3/1957   Reviewed 3/1957

ABSTRACT   In the course of the work dealing with interaction between the Pelletier
              coefficient P and the coefficient of the differential thermoelectro-
              motoric force α the authors succeeded in obtaining new results. In the
              first chapter the treatment of the previously obtained results in the
              case of a new graduation of thermocouples is dealt with. In order to
              avoid errors graduation of the thermocouples was carried out with the aid
              of a helium thermometer. The accuracy attained on the occasion with the
              determination of P and the results of temperature measurements per-
              mitted control of the equations mentioned in previous papers (Zhurn.Tekhn.
              Fiz., 1956, Vol 26, Nr 7, p 683). In the next chapter the new results
              are described. In diagrams the dependences of P and α on temperature are
              shown for the various samples. The inequation $P \neq \alpha T$, which was observed
              within the domain of admixture conductivity in the samples of germanium
              of the types "n" and "p" which are of different specific resistance,
              must be considered to be undisputed.
              The values for P and α, which were obtained in the samples investigated

Card 1/2

L 07579-67

ACC NR: AP6006554   (A)   SOURCE CODE: UR/0335/65/000/005/0012/0014

AUTHOR: Shtenberg, A. (Professor); Yurin, V.; Pugachev, P.

ORG: [Shtenberg] Nutrition Institute, AMN SSSR (Institut pitaniya AMN SSSR); [Yurin] Moscow Institute of Hygiene im. F. F. Erisman (Moskovskiy institut gigiyeny); [Pugachev] Moscow Technological Institute of the Meat and Dairy Industry (Moskovskiy tekhnologicheskiy institut myasnoy i molochnoy promyshlennosti)

TITLE: PE-500 polyethylene for packaging meat products

SOURCE: Myasnaya industriya SSSR, no. 5, 1965, 12-14

TOPIC TAGS: ethylene resin, polyethylene plastic, food technology, processed animal product, packing material, polyethylene / PE-500 polyethylene

ABSTRACT: Of the polyethylenes tested only the resin of polyethylene PE-500 was found to be suitable for packaging meat products. Wrappers 50 and 100 microns in thickness, bottles, and flasks prepared from PE-500 polyethylene were tested on 75% saccharose, 40% ethyl alcohol, 22% sodium chloride, and 2% acetic acid solutions, as well as on acidified and alkalized physiological solutions, hot water, and cold water. The experimental results show that 1) the packaging material exposed to the simulated food samples for 30 days does not change its appearance, 2) the simulated food samples do not show any visible changes in color or transparency, 3) most of the simulated

UDC 678.742:637.52.004.3

Card 1/2

L 07579-67

ACC NR: AP6006554   0

food samples in the bottle and flasks develop a strange odor and taste after a period of 3 and 7 days which becomes more pronounced with the prolongation of the contact time, 4) this phenomenon does not appear in samples enveloped in wrappers, 4) some low molecular weight compounds pass from the packaging material into the food samples after a contact time of 7 and 14 days, and 5) PE-500 polyethylene powder injected in animals for 8 months do not change their general condition. Sealed bags 10 x 20 cm in size prepared from the 50 and 100 micron wrapping material were tested on pork, beef, half-smoked sausage, lard, and other meat products and the results compared with those obtained from packaging similar food samples in glass jars. The test data lead to the conclusion that PE-500 polyethylene has good prospects as a packaging material for meat products. It is suggested that the polyethylene wrapping material be used in the main for wrapping meat products and the bottles and flasks be limited to packaging dry products. It is also suggested that meat products with a low fat content be packaged in the polyethylene packaging material for storing at temperatures higher than 4 C.

SUB CODE: 11, 08/   SUBM DATE: none

Card 2/2

SHTENBERG, A. I.

Jun 1947

USSR/Medicine – Jaundice
　　　Medicine –Liver

"Acute Toxic Hepatitis with Ascites", A. I. Shtenberg, Yu. I. Shillinger, Section on Alimentary Hygiene, of the Institute of Nutrition of the Academy of Medical Sciences of the USSR, 8 pp

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Historical discussion of the disease from its first occurrence in 1931 in Besh – aryk in the Tashkent area. Refers to work done by Burkser, Yakoblevoy, Tsener, and Men'shikov among others. In 1946 Yunusov and Sidyakin of the Institute of Chemistry, Academy of Science Uzbek SSR, determined that the mixture Heliotropium lasiocarpum also contains the two alkaloids Heliotropin and Lasiocarpin.

PA 16T47

SHTERBERG, A. I.

Shterberg, A. I. "Recent data on the natural arsenic content of plant and animal tissues and the effect of 'tissue' arsenic on the animal organism," Nauch. Trudy In-ta pitaniya (Akad. med. nauk SSSR), Moscow, 1948, p. 3-14 -- Bibliog: 30 items

So: U-3566, 1 March 53, (Letopis 'Zhurnal 'nykh Statey, No. 13, 1949)

SHTENBERG, A. I.

Shtenberg, A. I. "The effect of 'tissue' arsenic on the animal organism," Nauch. trudy In-ta pitaniya (Akad. med. nauk SSSR), Moscow, 1948, p. 15-28 -- Bibliog: 15 items.

So: U-3566, 16 March 53, (Letopis 'Zhurnal 'nykh Statey, No. 13, 1949)

REYSLER, A.V.; SHTENBERG, A.I.; MIN'OVICH, K.G., redaktor; KARASIK, N.,
    tekhnicheskiy redaktor

[Sanitary inspection of food products; general principles and
sampling] Sanitarnaia ekspertiza pishchevykh produktov; obshchie
printsipy i vziatie prob. Moskva, Gos. izd-vo med. lit-ry, 1950.
146 p. [Microfilm]   (MLRA 9:12)
        (FOOD ADULTERATION AND INSPECTION)

SHTENBERG, A. I.

Basic hygienic principles in dyeing of food products. Gig.,
sanit., Moskva No. 11, Nov. 50. p. 28-32

1. Of the Institute of Nutrition of the Academy of Medical
Sciences USSR and of the All-Union State Sanitary Inspection
Office.

CLML 20, 3, March 1951